

not limited or restricted to personal digital assistants, cellular telephones, digital cameras, video cameras, navigation systems, and the like.

Herein, the term “rotate” as well as varying tenses thereof is generally defined as the angular movement about an axis of rotation. The axis of rotation may be relatively fixed to the overall orientation of the electronic device. For this detailed description, when used to denote a direction of rotation, the term “vertically rotate” (or any tense thereof) relates to rotation about a generally horizontal axis of rotation. Similarly, the term “horizontally rotate” (or any tense thereof) relates to rotation about a generally vertical axis of rotation. The terms “translate”, “translation” or any tense thereof are defined as linear movement.

The term “interconnect” is any medium that is capable of transferring electrical signals from one point to another. Examples of an interconnect may include one or more electrical wires, any type of cable (e.g., flexible printed cable), optical fiber, or the like. A “display interconnect” is simply an interconnect coupled at one end to a display such as a flat panel display.

I. General Architecture

Referring to FIG. 1, a side view of an exemplary embodiment of an electronic device 100 placed in a TABLET position is shown. Herein, the electronic device 100 comprises a display 110 rotationally mounted on a body case 120 through a coupling member (not shown). Herein, the electronic device 100 operates as a tablet computer with the display 110 placed in a first (portrait) position.

More specifically, the display 110 contains a flat panel display 112 as well as all or part of the circuitry for generating a displayable image on the flat panel display 112. Examples of a flat panel display 112 include, but are not limited or restricted to a liquid crystal display (LCD), a plasma display or the like.

In accordance with this embodiment, the body case 120 comprises a first body 130 and a second body 140 rotationally coupled together by a hinge 150. The hinge 150 may be adapted as one or more friction hinges such as a brake hinge for example. This allows the second body 140 to be vertically rotated and maintained in any selected angle of rotation (α , where $0 \leq \alpha \leq 135$). It is contemplated, however, that the hinge 150 need not include brake hinges when there is no need for maintaining the second body 140 at an angled orientation.

The first body 130 comprises a base 131 and one or more protrusions 132 extending from the base 131. The base 131 is configured with a raised area 133, which is contoured to be complementary with a curvature of an edge 114 of the flat panel display 112 and generally flush with a top surface 116 of the display 110. The raised area 133 features a pointing device 200, which is accessible when the electronic device 100 is in the TABLET position.

For this embodiment of the invention, as shown in FIG. 2, the pointing device 200 comprises a pointer guide 202 and one or more select buttons (e.g., buttons 204 and 206). The pointer guide 202 enables a user to freely adjust the position of a pointer displayed on the flat panel display 112. The pointer guide 202 may be configured in a variety of arrangements such as a track ball, touch pad or even a tactile device as shown. The dual select buttons 204 and 206 mimic the “left-select” and “right-select” buttons of a desktop mouse.

Referring back to FIG. 1, the base 131 is also adapted with a memory interface 134. The memory interface 134 may be adapted as a bay or communication port to receive a portable

memory device such as one or more of the following: a memory card (e.g., PCMCIA card), a digital versatile disc (DVD), a compact disc (CD), a digital tape, or a floppy disk.

The protrusions 132 extend under recessed portions 142 of the second body 140. For instance, according to one embodiment of the invention, the protrusions 132 approximately extend up to a latitudinal center of the second body 140.

A first grommet pair 160 is positioned on a bottom surface 135 of the base 131. Moreover, a second grommet pair 162 is positioned on a bottom surface 136 of the protrusions 132. These grommets 160 and 162 prevent sliding of the electronic device 100 when used on a table or other flat surface.

The second body 140 may be rotated about an axis of rotation established by the hinge 150 after the display 110 has been appropriately rotated and translated as shown below. A pair of grommets 164 is positioned on a bottom surface 144 of the second body 140.

Optionally, a camera 170 may be rotationally coupled along an end 146 of the second body 140. Such coupling may be accomplished by a friction hinge, which would maintain the camera 170 facing in a direction manually set by the user. Upon activation of the camera 170, the captured digital image is processed by circuitry within the body case 120 and stored in (i) volatile or non-volatile memory deployed within the body case 120, or (ii) the portable memory device adapted to memory interface 134 as described above.

Referring now to FIG. 2, an overhead view of the electronic device 100 placed in the TABLET position is shown. Herein, the flat panel display 112 of the display 110 is mounted on the body case 120 in a stacked arrangement where the electronic device 100 operates as a portable tablet. For this embodiment of the invention, the display 110 is configured in an oblong shape having a concave curvature at edge 114 and a convex curvature at edge 115. In this orientation, the display 110 covers at least one-half, and as shown, over seventy percent of a footprint of the body case 120, including a keyboard (not shown) integrated into the first body 130 but excluding the pointing device 200.

As shown in FIG. 2, one or more hot keys 118 are integrated near an edge 115 of the display 110. A “hot key” is a recessed area that, when activated such as by contact with a stylus, causes a task to be more quickly performed than by selecting entries from menus via the pointing device 200. These tasks can be specified and programmed at manufacture or can be programmed by the user. In general, exemplary tasks controlled by the hot keys 118 include starting an application, establishing network connectivity (e.g., electronic mail), commencing a power-down procedure, or the like.

Alternatively, it is contemplated that the hot keys 118 may be used to adjust “style parameters,” namely indicia associated with line representations produced by a stylus or other writing instrument when the electronic device 100 is placed in the TABLET position. For instance, one or more of hot keys 118 may be used to adjust line color, line thickness, line pattern (e.g., solid, dashed, etc.). The hot keys 118 may also be used to provide special effects to the line (e.g., highlighting, color blending, or any other alteration of line color, thickness or pattern).

Referring to FIG. 3, a perspective view of the bottom sides 135, 136 and 144 of the electronic device 100 are shown. The first body 130 is configured with the protrusion 132 that are used to provide stability when the display 110 is rotated or translated as shown in FIGS. 4 and 5. The base 131 is sized to provide sufficient support for the display 110